

STATEMENT OF BASIS (AI No. 2557)

for draft Louisiana Pollutant Discharge Elimination System permit No. **LA0081353** to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Rain CII Carbon, LLC (previously permitted as CII Carbon, LLC)
 Chalmette Coke Plant and CT Terminal
 700 Coke Plant Road
 Chalmette, LA 70043

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
 Office of Environmental Services
 Post Office Box 4313
 Baton Rouge, Louisiana 70821-4313

PREPARED BY: Lisa Kemp

DATE PREPARED: December 23, 2009

1. PERMIT STATUS**A. Reason For Permit Action:**

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

- B. LPDES permits – LA0081353**
 LPDES permit effective date: February 1, 2005
 LPDES permit modification date: February 22, 2008
 LPDES permit modification date: August 1, 2009
 LPDES permit expiration date: January 31, 2010
 EPA has not retained enforcement authority.

LAG532996 (Outfall 307)
 LPDES permit effective date: December 12, 2008
 LPDES permit expiration date: November 30, 2012

- C. Date Application Received:** July 28, 2009; additional information received December 29, 2009

2. FACILITY INFORMATION**A. FACILITY TYPE/ACTIVITY - petroleum coke calcining facility and coke terminal**

The Rain CII Chalmette Coke Plant is a petroleum coke calcining facility. The facility consists of the coke process area and manufacturing support services. The raw material, petroleum coke, is produced in refinery coking units where the vacuum distillation residues of crude oils are thermally cracked and separated into gases, liquids, and coke. Rain CII obtains the petroleum (or green) coke from refineries and separates it into different grades. Calcination (also referred to as calcining) is a thermal treatment process applied to ores and other solid materials in order to bring about a thermal decomposition, phase transition, or removal of a volatile fraction. The calcination process normally takes place at temperatures below the melting point of product materials. The Chalmette facility has one rotary kiln with a capacity of 230,000 tons. As the coke moves through the revolving kiln, it is progressively heated to about 2,500 degrees Fahrenheit. Water and volatiles are driven off, and the remaining carbon rich solid is partially

Statement of Basis for
Rain CII Carbon, LLC, Chalmette Coke Plant and CT Terminal
LA0081353, AI No. 2557
Page 2

graphitized, producing a structure suited for anode production at aluminum smelters. The calcined coke is cooled with purified water and moved by conveyor to product storage. The calcined coke is transported to storage areas specifically designed for further blending. During vessel loading, the coke is blended from separate tanks and silos. At the customer location, the coke is used to make anodes which are consumed in the electrolytic process for making aluminum.

Support services include a warehouse/maintenance shop, railcar loading/unloading facilities, two sanitary treatment plants (STP), a water treatment plant, an administrative office, and the adjacent CT Terminal, L.L.C. (CT Terminal). Additionally, there is a cogeneration facility which produces electric power for plant operations. The plant operates 24 hours per day, 365 days per year.

Coke Process Area

Green petroleum coke is transferred from the adjacent CT Terminal facility via covered conveyors into the two-day tanks located at the north end of the kiln. The coke is then fed into the natural gas-fired, inclined, countercurrent rotary kiln for processing. The coke proceeds through the kiln and is then quenched by water spray in the cooler. The final product, calcined coke, is treated with heavy naphthlenic petroleum distillate (dust suppressant) while in transit to the storage silos at the adjacent CT Terminal.

The exhaust gases from the calcining process are a significant source of heat, which is recovered in the Waste Heat Boiler (WHB) to produce steam. The steam is piped to the Powerhouse to generate electricity. The power generation facilities are described below.

Warehouse/Maintenance Shop

The warehouse/maintenance shop area is centrally located within the coke processing area. This area primarily houses spare parts, tools, and equipment for servicing plant equipment. The building is enclosed.

Railcar loading/unloading Facilities

This system is used infrequently; however, on occasion, the facility receives green coke by railcar. The railcars are bottom unloaded into a below-grade chute, which feeds an underground conveyor belt system. The coke is then transferred and stored in the green coke barn or Nordberg Building No. 1 at the adjacent CT Terminal Facility. The unloading area is covered.

Sanitary Wastewater

There are now two STPs at the site. Sanitary discharges from the warehouse/maintenance shop, the control room, and the old administration building are treated in an activated sludge package treatment system which consists of an aeration unit, a settling tank, and post chlorination chamber. The treated effluent discharges to internal Outfall 207 and then final Outfall 007.

The second STP treats sanitary discharges from the new office building. An aerated wastewater treatment facility, with a design capacity of 500 GPD and post chlorination, came on line in the fall of 2008. The treated effluent discharges to internal Outfall 307 and then final Outfall 007. While Outfall 307 is currently authorized under the sanitary general permit (LAG532996), Rain

Statement of Basis for
Rain CII Carbon, LLC, Chalmette Coke Plant and CT Terminal
LA0081353, AI No. 2557
Page 3

CII is requesting in this permit application that Outfall 307 be included in individual LPDES permit LA0081353.

Water Treatment Plant

The facility utilizes Mississippi River water for all process and cooling water services. The intake pump house is located at the south end of the facility along the bank of the Mississippi River. Water is pumped into one of the two parallel clarifiers. The river water is treated with polymers to facilitate flocculation and sedimentation of solids. Chemicals are not added to the once through non contact turbine condenser water. The treated water is pumped to the facility for miscellaneous uses, such as kiln feed chute cooling, trunnion bearing cooling, area washdown, and wet scrubbing of cooler exhaust gases.

Co-Generation Facilities

Electric power for plant operations is produced at the Powerhouse located near the west/northwest property boundary. Heat from the calcining process is recovered in the WHB to produce steam, which is then routed to the turbine/generator to produce electricity. The capacity of the electricity generating system is 46 Megawatts (MW). Since facility operations do not consume all of the generated power, excess capacity provides power to the electric grid. The percentage of the total electricity produced which is used for on-site purposes is approximately 23%, with 77% being sold to the grid.

Condensate Project

Rain CII plans to use condensate from the adjacent facility, Chalmette Refining, LLC (Chalmette Refining), to generate steam for the production of electricity at Rain CII. Excess steam will be returned to Chalmette Refining. Treatment (polishing) of the condensate will result in a new wastestream (resin column backwash) to CII's permitted Outfall 007. Any possible hydrocarbon leaks at Chalmette Refining that could contaminate the condensate feed would be detected by a continuous hydrocarbon monitoring device, and any contaminated water will be contained and properly disposed of off site. Two solid waste streams will be generated by the condensate treatment: spent filters and resin. These will be properly disposed off site.

Electrodialysis Reversal (EDR)/ Reverse Osmosis (RO) Systems

Rain CII previously used an EDR system to pretreat the rotary cooler quench water. Effluent discharges from this system (including regeneration backwash and system overflow) were discharged via Outfall 007. The EDR system has been replaced with a Reverse Osmosis (RO) system for treatment of clarified water. The RO system will also treat a portion of the Chalmette Refinery condensate. The RO system results in the following discharges to Outfall 007: RO filter backwash and RO reject.

CT Terminal Bulk Material Handling Facility

CT Terminal, owned and operated by Rain CII, is adjacent to and west of the CII coke plant. This facility provides bulk material handling and storage services for the CII coke plant. These operations include the unloading and transfer of green coke from barges to the storage barn or Nordberg Building No.1 via covered belt conveyor system. In addition, calcined coke is transferred from the storage silos into barges or ships. Green coke may also be received by railcar at the Chalmette Coke Plant and transferred to the CT Terminal for storage.

Statement of Basis for
 Rain CII Carbon, LLC, Chalmette Coke Plant and CT Terminal
 LA0081353, AI No. 2557
 Page 4

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: V
3. Wastewater Type: I
4. SIC code: 2999,4911,4491

- C. LOCATION - 700 Coke Plant Road, in Chalmette, St. Bernard Parish. The discharges occur approximately at River Mile 89.4 Above Head of Passes (AHP).
 (Latitude 29° 56' 15", Longitude 89° 58' 37")

3. OUTFALL INFORMATION

Outfall 001

Discharge Type: once-through non-contact condenser cooling water
 Treatment: none
 Location: at the point of discharge from the condenser prior to combining with other waters
 (Latitude 29° 55' 54", Longitude 89° 58' 48")
 Flow: 71.2 MGD
 Discharge Route: Mississippi River

Outfall 006

Discharge Type: clarifier underflow
 Treatment: chemical flocculation and sedimentation (treatment of raw waters)
 Location: at the point of discharge from the discharge pump suction line prior to combining
 with other waters (Latitude 29° 55' 59", Longitude 89° 58' 49")
 Flow: 0.15 MGD
 Discharge Route: Mississippi River

Outfall 007

Outfall 007 discharges into the stormwater ditch system of the St. Bernard Port Authority (SBPA) complex. The effluent is routed to an approximately 10-acre retention basin located in the northwestern corner of the SBPA property. The retention basin gravity flows into the SBPA Drainage Discharge Pumping Station and is pumped to the Mississippi River via SBPA's permitted outfall (LPDES permit number LA0000878 Outfall 002).

Stormwater from SBPA enters the central drainage ditch as sheet flow prior to the Rain CII Outfall 007 monitoring point. In addition, SBPA leases property to multiple tenants conducting various commercial and/or industrial activities. Wastewater from these sources may enter the central drainage system prior to the Rain CII Outfall 007 monitoring point.

Note: It was stated in the previous permit application that SBPA treated sanitary wastewater (LA0000878 Outfall 107) discharged into the drainage ditch leading to Outfall 007 and was thus considered a contributor to Outfall 007. According to the July 28, 2009 application, this is not the case. The SBPA Outfall 107 effluent discharges downstream of Outfall 007 and is, therefore, not a contributor.

Discharge Type: stormwater runoff and miscellaneous process, utility, and cooling waters*
 Treatment: see table below*

Statement of Basis for
Rain CII Carbon, LLC, Chalmette Coke Plant and CT Terminal
LA0081353, AI No. 2557
Page 5

Location: at the point of discharge from the central ditch prior to combining with other waters and prior to discharge into the St. Bernard Port Authority retention pond (Latitude 29° 56' 18", Longitude 89° 58' 39")

Flow: 0.156 MGD (miscellaneous process, utility, and cooling waters – doesn't include SBPA stormwater runoff)
Maximum 30 Day – 1.991 MGD

Discharge Route: through the central ditch system into the SBPA retention pond, thence into the Mississippi River

*Miscellaneous process, utility, and cooling waters include:		
Wastewater	Flow (MGD)	Treatment
Treated sanitary wastewater (Outfalls 207 & 307)	0.0015	Package sewage treatment plant with chlorination
Waste heat boiler blowdown	0.007	None
Area hose down water	0.014	None
Process cooling water (trunnion bearings, kiln feed jacket, kiln hot spots, and wet scrubbing of cooler exhaust gases)	0.014	None
Cooling tower blowdown	<0.001	None
Powerhouse sump effluent	0.014	None
Reverse Osmosis (RO) filter backwash	0.003	None
RO Unit cleaning wastewater	0.0025 (batch)	None
RO reject	0.072	None
Rain CII and CT Terminal stormwater runoff	0.021	None
Condensate polisher backwash	0.006	None
SBPA stormwater runoff (permitted by LA0000876)	Intermittent	None

Outfall 207

Discharge Type: treated sanitary wastewater from the warehouse/maintenance shop, the control room, and the old administration building

Treatment: package sewage treatment plant with chlorination

Location: at the point of discharge from the STP prior to combining with other waters (Latitude 29° 56' 5", Longitude 89° 58' 38")

Flow: 0.001 MGD

Discharge Route: through Outfall 007 which discharges through the central ditch system into the SBPA retention pond; thence into the Mississippi River

Outfall 307 (LAG532996)

Discharge Type: treated sanitary wastewater from the new office building

Treatment: package sewage treatment plant with chlorination

Location: at the point of discharge from the STP prior to combining with other waters (Latitude 29° 56' 11", Longitude 89° 58' 38")

Flow: 0.0005 MGD

Statement of Basis for
 Rain CII Carbon, LLC, Chalmette Coke Plant and CT Terminal
 LA0081353, AI No. 2557
 Page 6

Discharge Route: through Outfall 007 which discharges through the central ditch system into the SBPA retention pond; thence into the Mississippi River

Outfall 008

Discharge Type: green coke barge rainwater
 Treatment: sock filter
 Location: at the point of discharge from the treatment system prior to combining with other waters
 Flow: intermittent
 Discharge Route: Mississippi River

4. RECEIVING WATERS

STREAM - Mississippi River

BASIN AND SEGMENT – The facility is located in Subsegment 041801; however, all discharges are into the Mississippi River, Mississippi River Basin, Segment 070301

DESIGNATED USES - a. primary contact recreation
 b. secondary contact recreation
 c. propagation of fish and wildlife
 d. drinking water supply

5. TMDL STATUS

Subsegment 070301, Mississippi River- from Monte Sano Bayou to Head of Passes, is not listed on LDEQ's Final 2006 303(d) List as impaired, and to date no TMDL's have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

6. CHANGES FROM PREVIOUS PERMIT

1. Outfall 001 – Effluent limitations for Total Residual Chlorine (TRC) have been included based on 40 CFR 423 (Steam Electric Power Generating Point Source Category) due to the quantity of electricity estimated to be marketed (>50% total). Sampling is required during usage of any biofouling agents or during periods of chlorination.
2. Outfall 207 – The description has been changed from "treated sanitary wastewater" to "treated sanitary wastewater from the warehouse/maintenance shop, the control room, and the old administration building" to distinguish Outfall 207 from Outfall 307. Monitoring frequency has been reduced to once per six months based on good compliance.
3. Outfall 307 (LAG532996) – This outfall discharges treated sanitary wastewater from the new office building and will be included in the renewal permit.
4. Monthly Average limitations for Fecal Coliform have been included for Outfalls 207 and 307. Weekly Average limitations for BOD₅, TSS, and Fecal Coliform are now Daily Maximum for Outfalls 207 and 307. These changes have been made in accordance with current LDEQ guidance for similar discharges.
5. Outfall 007 – Electrodialysis regeneration/backwash and Electrodialysis overflow are no longer discharged from Outfall 007. Wet scrubbing of cooler exhaust gases has been included in the description for process cooling waters.

Statement of Basis for
 Rain CII Carbon, LLC, Chalmette Coke Plant and CT Terminal
 LA0081353, AI No. 2557
 Page 7

6. Outfall 007 – The permittee requested a decrease in monitoring frequency from 1/week to 1/month. Based upon good compliance, the monitoring frequency has been reduced from 1/week to 2/month.
7. Outfall 007 – the outfall has been relocated in order to obtain a more representative sample, see outfall information for the latitude and longitude.
8. Outfall 008 – The permittee requested a decrease in monitoring frequency from 1/month to 1/quarter. This request has been denied. Although a DMR review for the past two years shows no excursions, monitoring frequency shall remain 1/month in accordance with current LDEQ permitting practices for similar outfalls at similar industrial facilities.
9. Because discharges from this facility flow into a drinking water protection area, language has been added to Other Conditions of the permit requiring the permittee to contact the nearby drinking water treatment facility in the event of any unauthorized discharge into the Mississippi River.
10. Language has been included in Other Conditions of the permit prohibiting the discharge of Polychlorinated biphenyl compounds (PCB's) based on 40 CFR 423.
11. Language has been included in Other Conditions prohibiting the discharge of total residual chlorine from any single generating unit for more than two hours per day. This language is based on 40 CFR 423.

7. COMPLIANCE HISTORY/COMMENTS

- A. OEC – There are no open, appealed, or pending OEC enforcement actions as of January 27, 2010.
- B. DMR Review/Excursions – DMRs were reviewed for the period September, 2007 through September, 2009. The following permit excursions were reported:

Parameter	Outfall	Monitoring Period End Date	Permit Limit	Reported Value
Fecal Coliform	207	Sept., 2009	400 col/100ml	11,400 col/100ml*
TSS	207	March, 2009	30 mg/L	36 mg/L
BOD ₅	307	March, 2009	30 mg/L	33 mg/L
pH	001	Sept., 2007	9.0 (max)	9.5

* according to the noncompliance report for the 3rd quarter, 2009, Outfall 207 has been plugged at the discharge and will be temporarily pumped out using River Parish Disposal until another means of disposal or discharge can be administered.

An incident was reported to the Southeast Regional Office via voicemail on July 23, 2008 (EDMS document # 37407048). According to the report, the pH at Outfalls 001 and 007 was 5.2-9.1 from 3:23 to 4:15 and bits of an oily substance were found in the water, possibly from an oil release in the Mississippi River.

- C. Inspection – The most recent inspection on file was a post Hurricane Katrina damage assessment performed on October 18, 2005 (EDMS document # 33606526). The site sustained major flood damage and minor wind damage. Only demolition and preparation work were being conducted at the time.

Statement of Basis for
Rain CII Carbon, LLC, Chalmette Coke Plant and CT Terminal
LA0081353, AI No. 2557
Page 8

8. EXISTING EFFLUENT LIMITS

Outfall 001 – once through non-contact condenser cooling water

Pollutant	Limitation		Frequency
	Monthly Avg	Daily Max	
	Mg/L (unless stated)		
Flow (GPD)	Report	Report	daily
Temperature, degrees F	Report	Report	daily
pH, standard units	6.0 (min)	9.0 (max)	continuously

Outfall 006 – clarifier underflow

Pollutant	Limitation		Frequency
	Monthly Avg	Daily Max	
	Mg/L (unless stated)		
Flow (GPD)	Report	Report	monthly
Clarifying Agents	N/A	Report	monthly

Outfall 007 – stormwater runoff and miscellaneous process, utility, and cooling waters*

Pollutant	Limitation		Frequency
	Monthly Avg	Daily Max	
	Mg/L (unless stated)		
Flow (GPD)	Report	Report	daily
Oil and Grease	---	15	weekly
TOC	---	75	weekly
pH, standard units	6.0 (min)	9.0 (max)	weekly

* miscellaneous process, utility, and cooling waters include treated sanitary effluent from Outfall 207, waste heat boiler blowdown, area hose down, process cooling water (trunnion bearings, kiln feed jacket, kiln hot spots), cooling tower blowdown, powerhouse sump, electrodialysis regeneration/backwash, electrodialysis overflow, CII stormwater runoff, SBPA treated sanitary wastewater (treated and monitored as per LA0000876), SBPA stormwater runoff (permitted by LA0000876), resin column backwash from the condensate polishing system, reverse osmosis (RO) filter backwash, RO unit cleaning wastewater, and RO reject.

Outfall 207 – treated sanitary wastewater

Pollutant	Limitation		Frequency
	Monthly Avg	Weekly Average	
	mg/L (unless stated)		
Flow (GPD)	Report	Report	quarterly
BOD ₅	30	45	quarterly
TSS	30	45	quarterly
Fecal Coliform colonies/100ml	---	400	quarterly
pH, s.u.	6.0 (min)	9.0 (max)	quarterly

Statement of Basis for
Rain CII Carbon, LLC, Chalmette Coke Plant and CT Terminal
LA0081353, AI No. 2557
Page 9

Outfall 008 – green coke barge rainwater

Green Lake Barge Rainwater			
Pollutant	Limitation		Frequency
	Monthly Avg	Daily Max	
	mg/L (unless stated)		
Flow (GPD)	Report	Report	monthly
TOC	---	75	monthly
TSS	---	70	monthly
Oil & Grease	---	15	monthly
pH, s.u.	6.0 (min)	9.0 (max)	monthly

Outfall 307 – treated sanitary wastewater (LAG532996)

Sanitary Sewer Treated Sanitary Wastewater (LAG 532996)			
Pollutant	Limitation		Frequency
	Monthly Avg	Weekly Average	
	mg/L (unless stated)		
Flow (GPD)	---	Report	1/6 months
BOD ₅	30	45	1/6 months
TSS	30	45	1/6 months
Fecal Coliform colonies/100ml	200	400	1/6 months
pH, s.u.	6.0 (min)	9.0 (max)	1/6 months

9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 070301 of the Mississippi River Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid sturgeon, which is listed as an endangered species. LDEQ has not submitted this draft permit to the FWS for review in accordance with a letter dated January 5, 2010 from Rieck (FWS) to Nolan (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and based on information provided by the FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the Pallid sturgeon. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

Statement of Basis for
Rain CII Carbon, LLC, Chalmette Coke Plant and CT Terminal
LA0081353, AI No. 2557
Page 10

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

Statement of Basis for
Rain CII Carbon, LLC, Chalmette Coke Plant and CT Terminal
LA0081353, AI No. 2557
Page 11

Rationale for Rain CII Carbon, LLC

1. **Outfall 001** - once-through non-contact condenser cooling water (estimated flow is 71.2 MGD)

Pollutant	Limitation		Reference
	Monthly Avg	Daily Max	
	Mg/L (unless stated)		
Flow (GPD)	Report	Report	LAC 33:IX.2707.I.b
Temperature, degrees F (*1)	Report	Report (*2)	BPI; previous permit
Total Residual Chlorine (TRC) (*3)	---	0.2 mg/L	40 CFR 423.13(b)(1)
pH, s.u.	6.0 (min)	9.0 (max)	previous permit; 40 CFR 423.12(b)(1)

Treatment: none

Monitoring Frequency: continuously for pH, once/week for TRC, and daily for all other parameters at the point of discharge from the condenser prior to mixing with other waters (BPJ; previous permit)

Limits Justification: BPJ; previous permit and 40 CFR 423 (Steam Electric Power Generating Point Source Category) due to quantity of electricity estimated to be marketed (>50% total). A requirement is included in the permit prohibiting the use of additives such as corrosion inhibitors or bactericides without prior authorization.

- (*1) Future water quality studies may require temperature limitations for once through non-contact cooling water. If such a limitation were imposed, the permittee would be required to reduce the temperature of the effluent.
- (*2) Instantaneous maximum.
- (*3) Total Residual Chlorine shall only be monitored during times of chlorination or other biocide usage.

2. **Outfall 006** – clarifier underflow (estimated flow is 0.15 MGD))

Pollutant	Limitation		Reference
	Monthly Avg	Daily Max	
	Mg/L (unless stated)		
Flow (GPD)	Report	Report	LAC 33:IX.2707.I.b
Clarifying Agents	N/A	Report(*1)	BPJ; previous permit; similar discharges

Treatment: chemical flocculation and sedimentation

Monitoring Frequency: once per month for all parameters at the point of discharge from the discharge pump suction line prior to mixing with other waters

Limits Justification: BPJ; previous permit and current LDEQ guidance for similar discharges.

- (*1) The quantity and types of all coagulants (clarifying agents) used in the intake raw river water

Statement of Basis for
Rain CII Carbon, LLC, Chalmette Coke Plant and CT Terminal
LA0081353, AI No. 2557
Page 12

treatment clarification system during the sampling month shall be recorded. Records of the quantity and type of coagulants used shall be retained for three (3) years following Standard Conditions for LPDES Permits, Section C.3. No DMR reporting shall be required.

3. **Outfall 007** – stormwater runoff and miscellaneous process, utility, and cooling waters* (estimated flow is 0.156 MGD for miscellaneous process, utility, and cooling waters – not including SBPA stormwater runoff; Maximum 30 Day – 1.991 MGD)

Pollutant	Limitation		Reference
	Monthly Avg	Daily Max	
	Mg/L (unless stated)		
Flow (GPD)	Report	Report	LAC 33:IX.2707.I.b
Oil and Grease	---	15	BPJ; previous permit; similar discharges
TOC	---	75	BPJ; previous permit; similar discharges
pH, s.u.	6.0 (min)	9.0 (max)	BPJ; previous permit; similar discharges

Treatment: See table below

Monitoring Frequency: twice /month for all parameters at the point of discharge from the central ditch prior to combining with other waters. Monitoring frequency has been reduced based on good compliance.

Limits Justification: BPJ; previous permit and current guidance for similar discharges from other industrial facilities. Although TSS monitoring would typically be required for coke handling facilities, TSS limits were not included based on the previous permit. TSS limits were not included in the previous permit because a stormwater pollution prevention plan is required by the permit and because stormwater from Outfall 007 flows into the St. Bernard Port Authority stormwater settling pond, providing treatment of the water.

*Miscellaneous process, utility, and cooling waters include:		
Wastewater	Flow (MGD)	Treatment
Treated sanitary wastewater (Outfalls 207 & 307)	0.0015	Package sewage treatment plant with chlorination
Waste heat boiler blowdown	0.007	None
Area hose down water	0.014	None
Process cooling water (trunnion bearings, kiln feed jacket, kiln hot spots and wet scrubbing of cooler exhaust gases)	0.014	None
Cooling tower blowdown	<0.001	None
Powerhouse sump effluent	0.014	None
Reverse Osmosis (RO) filter backwash	0.003	None
RO Unit cleaning wastewater	0.0025 (batch)	None
RO reject	0.072	None

Statement of Basis for
Rain CII Carbon, LLC, Chalmette Coke Plant and CT Terminal
LA0081353, AI No. 2557
Page 13

*Miscellaneous process, utility, and cooling waters (continued)		
Rain CII and CT Terminal stormwater runoff	0.021	None
Condensate polisher backwash	0.006	None
SBPA stormwater runoff (permitted by LA0000876)	Intermittent	None

4. **Outfall 207** – treated sanitary wastewater from the warehouse/maintenance shop, the control room, and the old administration building (estimated flow is 0.001 MGD)
Outfall 307 – treated sanitary wastewater from the new office building (estimated flow is 0.0005 MGD)

Pollutant	Limitation		Reference
	Monthly Avg	Daily Max	
	mg/L (unless stated)		
Flow	Report	Report	LAC 33:IX.2707.1.b
BOD ₅	30	45	Similar discharges* (BPJ), LAG530000
TSS	30	45	Similar discharges* (BPJ), LAG530000
Fecal Coliform colonies/100ml	200	400	Similar discharges* (BPJ), LAG530000
pH, s.u.	6.0 (min)	9.0 (max)	Similar discharges* (BPJ), LAG530000

Treatment: package sewage treatment plant with chlorination

Monitoring Frequency: Semiannually for all parameters at the point of discharge from the STP prior to mixing with other waters.

Limits Justification: Limits are based on current guidance for similar discharges from other industrial facilities and the Class I Sanitary Discharge General Permit, LAG530000 effective December 1, 2007.

5. **Outfall 008** – green coke barge rainwater (flow is intermittent)

Pollutant	Limitation		Reference
	Monthly Avg	Daily Max	
	mg/L		
Flow	Report	Report	LAC 33:IX.2707.1.b
TOC	---	75	Previous permit; BPJ LA0087777(CII/Gramercy)
TSS	---	70	Previous permit; BPJ LA0087777(CII/Gramercy)
Oil & Grease	---	15	Previous permit; BPJ LA0087777(CII/Gramercy)
pH, s.u.	6.0 (min)	9.0 (max)	Previous permit; BPJ LA0087777(CII/Gramercy)

Treatment: sock filter

Monitoring Frequency: once per month for all parameters at the point of discharge from the treatment system prior to combining with other waters based on the previous permit and in accordance with current

Statement of Basis for
Rain CII Carbon, LLC, Chalmette Coke Plant and CT Terminal
LA0081353, AI No. 2557
Page 14

permitting practices for similar outfalls.

Limits Justification: BPJ, based on the previous permit as per existing permit for CII Carbon/Gramercy Coke Plant (LA0087777) and in accordance with current permitting practices for similar outfalls.

* Existing permits for similar outfalls
su Standard Units

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 2999 are considered to have storm water discharges associated with industrial activity.

For first time permit issuance, the SWP3 shall be prepared, implemented, and maintained within six (6) months of the effective date of the final permit. **For renewal permit issuance**, the SWP3 shall be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI). The SWP3 shall include the operations at the dock.

ADDITIONAL INFORMATION

Notification of Monitoring Frequency Reduction

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of permit compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. If the Department can be of any assistance in this area, please do not hesitate to contact us. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.